

IEP Tidal Wetlands Monitoring Project Work Team Meeting Notes

July 30, 2014

DWR – West Sacramento – Room 106

Meeting Attendance

DFW - Alice Low, Rosemary Hartman, Stacy Sherman, Dave Contreras, Trishelle Morris, Andy Rockriver, Phillip Poirier, Adam Ballard, Michael Eakin, Dave Zezulak, Carl Wilcox, Carol Atkins

USFWS – Joseph Kirsch, Lori Smith, Heather Swinney, Katherine Sun

USGS – Larry Brown,

DWR – Ted Sommer, Kris Jones, Gardner Jones, Heather Fuller, Erik Loboschetsky, Gina Benigno, Joy Khamphanh, Louise Conrad, Pascale Goertler, Anitra Pawley

N/A – Bruce Herbold

ICF – Rebecca Sloan, Pat Crain

SFEI – April Robinson

NOAA – Brycen Swart

DSC – Daniel Huang, Lauren Hastings

DSP – Jennifer Bigman

ESA – Ramona Swenson

UCD – Jim Hobbs

MWD – Marty Meisler

SFCWA – Val Connor

Delta Conservancy – Kristal Fadtke

Topic: Team Mission Statement

Alice presented a revised version of the Tidal Wetland Project Work Team problem statement based on comments from the last meeting.

Group comments:

- The project work team statement appears to be based on OCAP is there room to expand (i.e. monitor terrestrial species)?
 - Response - There is room to expand, but our current efforts are focused on aquatics
- The last statement should be rewritten to incorporate how site specific monitoring will lead into a generalized monitoring plan for each site.

Any comments or edits on the Project Work Team statement may be sent to Alice Low

(alice.low@wildlife.ca.gov).

Topic: Conceptual Model (CM) Updates

The CM sub team met two times before this project work team meeting to update conceptual models. All models were presented in a tiered format borrowed from the Delta Smelt CM in the MAST report.

Tidal Wetland CM – Presented by Rosemary Hartman

Group comments:

- What does arrow color signify?

- Response - Colored arrows were added to make it easier to read and have no significance
- Should add an arrow from tier 5 to tier 1
- Should add nutrients in the Hydrology section of tier 2

Tidal Exchange & Connectivity CM - Presented by Bruce Herbold

Group comments:

- Perhaps add two way arrows
- Physical characteristics overlap
 - Characteristics in intermediate drive what make it to the target species
- Use a different word for “survival rate”, maybe use “survival potential”
- The species conceptual models should link to the Target tier

Tidal Wetland Evolution CM - Presented by Rosemary Hartman

Group comments:

- Tiers format is not the same as the others
- Aquatic vegetation should be in driver in tier 3
- Add another tier that feeds into the tidal wetland model
- Tier 4 appears to be a landscape response
- Add an feedback arrow from tier 4 to tier 1
- May need to address tidal wetland migration
- Think about research questions but keep in mind the project goals

Food Web CM - Presented by Bruce Herbold

Group comments:

- Productivity export is missing in the upper tiers, which may be addressed by having a link to the tidal exchange CM at the “target species” tier
- Add a bidirectional arrow between fish models and predators
- Incorporate a consistent tier naming convention

Delta smelt CM - Presented by Ted Sommer

Group comments:

- Edit the model to fit tidal wetland restoration, perhaps by greying out the processes that do not apply to tidal wetland restoration

Salmon CM - Presented by Pascale Goertler

Group comments:

- Tier 3 – entrainment risk should be in tier 1
 - Response – Entrainment in tier 3 does not represent the large scale water diversions. It represents entrainment risk at a smaller scale
- Competition between species is not addressed.
 - Perhaps replace predation risk with predation/other consumers

Aquatic Vegetation- Presented by Louise Conrad

Group comments:

- Change “Physical Attributes” to “Other Physical Attributes”
- Add “Architecture” in the “Responses” tier and link it to the Species CM
- Add a link to the tidal wetland CM
- Try to get a tidal wetland botanist to QC this model

Clam Model CM - Presented by Rosemary Hartman

Group comments:

- Remove temperature from the model
- Add microzooplankton as they will also be consumed
- Add predators benthic fish and diving ducks

Next steps for all conceptual models:

- If possible, have all conceptual models in a similar tier format/naming convention
- Revise all conceptual models based on group comments
- Develop hypothesis
- Incorporate arrow detail (i.e. arrow thickness = importance, arrow pattern = predictability, etc)
- Develop text for each CM and have them reviewed by outside researchers for publication

Topic: Coordination with the other workgroups

Lauren Hastings provided a list of similar efforts occurring in the Delta that may be helpful to the project work team. Lauren suggested that we should look at the State of the Estuary 2015 Indicator Report and CA Estuary Monitoring Workgroup and Estuaries Portal.

Group comments:

- We should coordinate with the Delta Science Plan to make sure our work has not/is not duplicated
- CA Estuary Monitoring Workgroup and Estuaries Portal may be a good place to display and house the conceptual models we produced
- Coordinate with the Delta Science Plan to “house” a spot for all monitoring efforts occurring
 - Response - This may be addressed by the current proposal of the Restoration Hub

Lauren will update the list she provided and include web links.

The next Tidal Wetland PWT meeting will occur August 27 from 09:00-12:00 at the DWR building in West Sacramento, Room 106.